

SMA3: An Overview

October 24, 2019

2020-2025 Strategic
Mandate Agreement

Overview

1. Background
2. Funding Metrics
3. Discussion Questions
4. Next Steps

Background

Overview

- Overall SMA 3 instructions were released in September which provided information on:
 - Metrics – definitions and activation
 - Target Setting, Band of Tolerance, and Penalties
 - Weighting and Amount of Funding at Risk
 - Enrolment Setting
- Institution specific information was released during the first week of October
- Negotiations will last from October 2019 thru March 2020
 - One institutional site visit
- **No new money – a portion of government grant revenue becomes tied to performance metrics under SMA3**

Target Setting, Band of Tolerance, and Penalties

- Ministry will provide suggested:
 - Targets – average of the previous three years + average difference in each year
 - Band of Tolerance – based on “variance” over the past three years

Example: – if three years data is 78, 80 & 82

– target is 82 – average (80) + small diff (2)

– band of tolerance – 2.5%

- Penalties:
 - One year only, distributed to achievers

Weighting and Amount at Risk

- Weighting:
 - 2020-21: Maximum 35%, minimum 10%
 - 2021-22: Maximum 30%, minimum 5%
 - 2022-23: Maximum 25%, minimum 5%

- Amount at Risk: ~ \$58 M growing to \$153 M est.

	2020-25 Strategic Mandate Agreements (SMA3)					
Year	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
System-wide Proportion: Performance/Outcomes-Based Funding	1.2% (C) 1.4% (U)	25%	35%	45%	55%	60%
Projected WFU Value*	\$4,150	\$2,990	\$2,447	\$1,904	\$1,360	\$1,089
Projected WGU Value*	\$2,903	\$2,343	\$2,000	\$1,657	\$1,314	\$1,143

Table 2. WFU/WGU Modifications

*Modification will be impacted by overall grant levels, as well as proportionality of grant types at the time, therefore the above are estimates based on 2017-18 allocations.

Enrolment Setting

- Reconfirms the Corridor Funding Model
- No new undergraduate enrolments for 5 years
- Freeze graduate enrolments at 2019-20 levels
- May provide additional flexibility by removing barriers between undergraduate/masters/doctoral level enrolments

SMA3 Metrics: Activation Map

			SMA2	SMA3	SMA3	SMA3	SMA3	SMA3	
	Metric	Data Source	Sector	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Skills & Job Outcomes	Graduate Earnings	Statistics Canada	Colleges and Universities	Initial collection & cleaning	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Experiential Learning	OCAV, TCU, Institutions	Colleges and Universities	Initial collection & cleaning	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Skills & Competencies	Under Development	Colleges and Universities	Metric data development	Initial collection & cleaning	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Graduate Employment	TCU Survey	Colleges and Universities	Included in SMA2	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Institutional Strength/Focus	TCU	Colleges and Universities	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Graduation Rate	TCU Graduate Record File	Colleges and Universities	Included in SMA2	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
Economic & Community Impact	Research Funding & Capacity	Tri-council	Universities ONLY	Included in SMA2	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Apprenticeship Related	Under development	Colleges ONLY	Metric data development	Metric data development	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Innovation	Financial data (Industry Funding)	Colleges and Universities	Metric data development	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Community / Local Impact	Student Population TCU	Colleges and Universities	Data review & analysis	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	Institution Specific Metric	Institutions (Economic Impact)	Colleges and Universities	Included in SMA2	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding	Metric activated for funding
	*Faculty Workload	Institutions	Colleges and Universities	Initial Instructions to Institutions	Publication	Publication	Publication	Publication	Publication
	*Faculty Compensation	Institutions	Colleges and Universities	Initial Instructions to Institutions	Publication	Publication	Publication	Publication	Publication
*Productivity, Accountability and Transparency Metrics for Data Collection Only									

Funding Metrics

Caveat:

- The following slides are intended to be **illustrative** of what is known about the SMA3 funding metrics **based on Ryerson data sources and our understanding of ministry definitions to date.**
- The ministry is providing further information as part of the SMA3 negotiation process, including the reference data and targets they propose to use.

1. Graduate Employment (Rate) in a related field

Proportion of graduates of bachelor or first professional degree programs employed full-time who consider their jobs either “closely” or “somewhat” related to the skills they developed in their university program, two years after graduation

Activated immediately in 2020-21

- Existing SMA2 metric carried into SMA3
- Source: Ontario University Graduate Survey (annual)
- This metric is actually **not an employment rate**
- **Lagging indicator**; most recent data is for Class of 2016
- Results are in a **downtrend** with a slight uptick for most recent cohort
- Results depend on **labour market conditions**, respondents’ **self-reported subjective interpretation** of relatedness of job to skills developed at university, and have a **margin of error** because they are based on surveying graduates
- Historical results: 92.0%, 91.0%, 91.0%, 89.1%, 89.5% (2012 to 2016 grads)
- Volatility/trend profile: ■ ■ ■ — —
- Target: 90.3% (est.)
- Minimum allowable performance (floor) without financial penalty: 89.1% (est.)

2. Institutional Strength/Focus

Proportion of enrolment (FTEs, domestic and international) in an institution's program area(s) of strength

Activated immediately in 2020-21

- **New** metric for SMA3
- **What criteria should be used to arrive at Ryerson's institutional strength/focus?**
 - Should reflect Ryerson's program areas of expansion in SMA2:
 - **Innovation and Entrepreneurship**
 - **Design and Technology**
 - **Management and Competitiveness**
 - **Creative Economy and Culture**
 - **Health and Technology**
 - Should span all Faculties
 - Should be trackable by ministry by **CIP code** (major subject groups)
- Excludes some programs – **by definition, proportion must be less than 100%**
- Relatively high degree of institutional control over achieving targets
- Historical results: TBD
- Target: TBD
- Minimum allowable performance (floor) without financial penalty: TBD

2. Institutional Strength/Focus (Cont'd)

- Some **potential criteria** under consideration as filters to arrive at Ryerson's **SMA3 institutional strength/focus**:
 - Planned enrolment levels throughout SMA3
 - New programs under development
 - Entering averages
 - Applicant to registrant ratios
 - Retention rates
 - Graduation rates
 - Employment rates
 - *Etc. ...*

2. Institutional Strength/Focus (Cont'd)

Share of 2018-19 FTE Enrolment (undergraduate and graduate programs) by CIP and SMA2 Categories						
Statistics Canada CIP Program Areas	SMA2 Categories					
	1. Innovation and Entrepreneurship	2. Design and Technology	3. Management and Competitiveness	4. The Creative Economy and Culture	5. Health and Technology	Total
03. Natural resources and conservation					1.0%	1.0%
04. Architecture and related services		1.4%			1.4%	2.8%
05. Area, ethnic, cultural, gender, and group studies					0.2%	0.2%
09. Communication, journalism and related programs	0.1%			5.4%		5.5%
10. Communications technologies/technicians and support services				1.9%		1.9%
11. Computer and information sciences and support services		2.9%	0.1%			3.0%
13. Education					2.2%	2.2%
14. Engineering	0.1%	13.6%				13.7%
16. Aboriginal and foreign languages, literatures and linguistics				0.2%		0.2%
19. Family and consumer sciences/human sciences				0.8%	3.2%	4.0%
23. English language and literature/letters				1.1%		1.1%
24. Liberal arts and sciences, general studies and humanities				1.2%		1.2%
26. Biological and biomedical sciences					3.4%	3.4%
27. Mathematics and statistics			1.0%			1.0%
30. Multidisciplinary/interdisciplinary studies				0.2%	0.1%	0.3%
38. Philosophy and religious studies				0.4%		0.4%
40. Physical sciences					0.6%	0.6%
42. Psychology					1.6%	1.6%
44. Public administration and social service professions			0.4%		2.7%	3.1%
45. Social sciences			2.3%	0.6%	2.6%	5.5%
50. Visual and performing arts		1.0%		6.3%		7.3%
51. Health professions and related programs					10.4%	10.4%
52. Business, management, marketing and related support services	1.3%		27.6%			28.9%
54. History				0.6%		0.6%
55. French language and literature/letters				0.2%		0.2%
Total	1.5%	18.9%	31.3%	18.8%	29.5%	100.0%

3. Graduation Rate

Proportion of all new, full-time, year one undergraduate university students (domestic and international) of bachelors (first-entry), or all full-time, year one undergraduate university students in first professional (second entry) degree programs who commenced their study in a given fall term and graduated from the same institution within 7 years

Activated immediately in 2020-21

- Existing SMA2 metric modified for SMA3 with an OEN-based top-up to reflect students who started at Ryerson but graduated at another Ontario university
- Results shown below do not include the OEN-based top-up which is pending from the ministry
- **Substantially lagging indicator** because of **7-year graduation window**
- Latest results in SMA2 annual report are for the 2011 cohort
- Historical results: 73.4%, 72.4%, 72.8%, 72.5%, 74.4% (2007 to 2011 cohorts)
- Volatility/trend profile: ■ _ _ _ ■
- Target: 73.5% (est.) ■ _ ■
- Minimum allowable performance (floor) without financial penalty: 72.5% (est.)

4. Graduate Employment Earnings

Median employment earnings of university graduates, two years after graduation

Activated in 2021-22

- **New** metric for SMA3
- Based on Statistics Canada Education and Labour Market Longitudinal Platform (ELMLP) tax-linkage data
- **Lagging indicator**
- Results depend on **labour market conditions** and graduates' personal choices about their preferred career paths
- **Risk of sudden decline** in an economic downturn
- Limited historical data available
- **Weighted average of median earnings by the number of graduates at each degree level** (bachelor's, master's, doctoral)
- Historical results: \$47,994, \$47,919, \$46,508, \$46,650, \$46,187 (2010 to 2014 grads)
 - n/a , n/a , \$69,900, \$80,000, \$56,300 (Doctoral degree)*
 - \$60,200, \$61,100, \$58,000, \$59,700, \$56,600 (Master's degree)*
 - \$45,700, \$45,900, \$44,400, \$44,300, \$44,500 (Bachelor's degree)*
- Volatility/trend profile: ■ ■ _ _ _
- Target: \$46,591 (est.)
- Minimum allowable performance (floor) without financial penalty: \$46,187 (est.)

5. Experiential Learning

Number and proportion of graduates in programs, who participated in at least one course with required Experiential Learning (EL) component(s)

Activated in 2021-22

- **New** metric for SMA3
- Comprised of two sub-metrics: (a) number and (b) proportion of graduates from undergraduate programs who experienced EL
- Only the **proportion** to be **used for SMA3** performance/outcomes-based **funding**
- Requires setting up and maintaining a **course tagging** infrastructure in SAS
- Starting point definition for courses to include is **ministry's 2017 "Guiding Principles for Experiential Learning"**
- Experiential learning resonates as an institutional strength consistent with Ryerson's mission, mandate, and vision
- Ryerson has reasonable degree of control on achieving targets
- Any large year-over-year growth will trigger excessively-high future targets due to ministry's algorithms for setting targets and bands of tolerance
- Historical results: TBD
- Target: TBD
- Minimum allowable performance (floor) without financial penalty: TBD

6. Skills & Competencies

Education and Skills Online: Random sample of undergraduate students (domestic and international)


Activated in 2022-23

- **New** metric for SMA3
- **Weight** for all institutions will be **set by ministry at 5%** starting in year 2022-23 and **achieved by participating and posting of results online**
- Uses the **Education and Skills Online (ESO) tool** which examines students' ability to apply literacy, numeracy and problem solving skills to real-world tasks. An adaptive, online assessment that increases or decreases in difficulty depending on the test-taker's performance
- Consists of background questionnaire and three major components: **Literacy, Numeracy** and **Problem Solving** in Technology-Rich Environments (PS-TRE)
- Results dependent on **motivating student participation** in a "test" that is not part of academic requirements
- Historical results: N/A
- Target: Participate in ESO and post institutional results
- Minimum allowable performance (floor) without financial penalty:
Participate in ESO and post institutional results

7. Community/Local Impact

Institutional enrolment share in the population of the city (cities)/town(s) in which the institution is located

Activated immediately in 2020-21


- **New** metric for SMA3
- **Numerator** is currently Fall headcount of all **full-time and part-time students**
- Possibility that ministry will adopt an FTE measure for enrolment numerator
- Uncertain about how ministry will count collaborative nursing
- **Denominator** is **Toronto Population Centre 15-64 year olds** (2016 Census)
- Ministry will use the **same 2016 Census denominator throughout SMA3** period
- Ryerson has a reasonable degree of control on achieving targets
- With capped domestic enrolment under enrolment corridor, **international enrolment** will need to be the driver for increases
- Historical results: .0110, .0113, .0170, .0121, .0123, .0125 (2013-14 to 2018-19)
- Volatility/trend profile: 
- Target: .0125 (est.)
- Minimum allowable performance (floor) without financial penalty: .0123 (est.)

8. Economic Impact: Institution-Specific

*Possible candidate metrics: **diversity** OR # of start-ups OR # of invention disclosures*

Institutions to include definition of their institutional metric. The metric should demonstrate the economic impact of their institution, using ministry established principles.

Activated immediately in 2020-21

- **New** metric for SMA3 but can re-use applicable institutional metrics from SMA2
- **Which metric should Ryerson adopt as its institution-specific economic impact measure?**
- **Diversity Index** calculated based on: ethno-cultural characteristics question in National Survey of Student Engagement (NSSE) which has a longer time series *or* racial identity question in Ryerson Diversity Self-ID Survey
- Results from additional survey questions can potentially be added to incorporate other demographic/socio-economic characteristics in the diversity index
- Historical results: 0.776, 0.798, 0.813 (NSSE 2011, NSSE 2014, NSSE 2017)
- Volatility/trend profile: 
- Target: 0.811
- Minimum allowable performance (floor) without financial penalty: 0.792 (est.)

Continues ...

8. Economic Impact: Institution-Specific (Cont'd)

Possible candidate metrics: diversity OR # of start-ups OR # of invention disclosures

Institutions to include definition of their institutional metric. The metric should demonstrate the economic impact of their institution, using ministry established principles.

Activated immediately in 2020-21


- **New** metric for SMA3 but can re-use applicable institutional metrics from SMA2
- **Which metric should Ryerson adopt as its institution-specific economic impact measure?**
- Under SMA2, Ryerson used both the # of start-ups and # of invention disclosures
- Historical results: 159, 238, 323, 325 (# of start-ups)
30, 34, 50, 58, 57 (# of invention disclosures)
- Volatility/trend profile:

—	■	■	■	■	(# of start-ups)
—	—	■	■	■	(# of invention disclosures)
- Target: 297 est. (# of start-ups)
56 est. (# of invention disclosures)
- Minimum allowable performance (floor) without financial penalty:
243 est. (# of start-ups)
51 est. (# of invention disclosures)

9. Research Funding & Capacity: Federal Tri-Agency Funding Secured

Amount and proportion of funding received by institution from federal research granting agencies (SSHRC, NSERC, CIHR) in total Tri-Agency funding received by Ontario universities


Activated immediately in 2020-21

- Existing SMA2 metric, possibly modified for SMA3
- Ministry indicates that only the proportion will be used as a funding metric
- **Lagging indicator** due to 3-year rolling average, one-year slip
- Dependent on **government budget decisions on allocations** to federal research granting agencies and results of **competition across institutions**
- Proportion of total can decrease even if Ryerson's amount of research funding increases because the proportion is also dependent on what happens to the total Tri-Agency funding received by Ontario universities
- Historical results: 2.36%, 2.73%, 2.84%, 3.02% (latest data averages 2015-16 to 2017-18)
- Volatility/trend profile: 
- Target: 2.97% (est.)
- Minimum allowable performance (floor) without financial penalty: 2.81% (est.)

10. Innovation: Research Revenue Attracted from Private Sector Sources

Research revenue attracted from private sector sources

Activated in 2021-22

- **New** metric for SMA3
- Rolling average of three most recent years
- Issue of **exclusion of non-profits** from this metric even though businesses may set-up non-profits to disburse this type of funding to universities
- Highly subject to **external economic conditions**
- Historical results: \$3,877, \$3,566, \$3,691, \$4,385, \$4,136, \$4,424 (in \$000s)
- Volatility/trend profile: 
- Target: \$4,564 (est.)
- Minimum allowable performance (floor) without financial penalty: \$4,276 (est.)

Institutional Weighting Strategy: Preliminary Risk Factors Summary

	Risk Factors		
	Volatility	Institutional Control	Risk of Decline
Metric			
Graduate Employment Rate in a related field	●	●	●
Institutional Strength/Focus	●	●	●
Graduation Rate	●	●	●
Community/Local Impact	●	●	●
Institution-Specific (Economic Impact)	●	●	●
Federal Tri-Agency Funding Secured	●	●	●
Graduate Employment Earnings	●	●	●
Experiential Learning	●	●	●
Research Revenue from Private Sector	●	●	●
Skills & Competencies*	●	●	●

**The Skills & Competencies metric for all institutions will be weighted at 5% starting in year 2022-23 for participation and posting of results online. The risks shown above relate to the results scores which would be a factor if and when the ministry chooses to base this metric on the scores rather than on participation and posting of results online.*

SMA3 Performance/Outcomes Funding: Based on **Affectable*** vs Unaffected Historical Results

	SMA3 Year				
	2020-21	2021-22	2022-23	2023-24	2024-25
	<i>Performance on results for cohort or year:</i>	<i>Performance on results for cohort or year:</i>	<i>Performance on results for cohort or year:</i>	<i>Performance on results for cohort or year:</i>	<i>Performance on results for cohort or year:</i>
Metric					
Graduate Employment Rate in a related field	2017	2018	2019	2020	2021
Institutional Strength/Focus	2019	2020	2021	2022	2023
Graduation Rate	2012	2013	2014	2015	2016
Community/Local Impact	2019	2020	2021	2022	2023
Institution-Specific (Economic Impact)	2019	2020	2021	2022	2023
Federal Tri-Agency Funding Secured	2018	2019	2020	2021	2022
Graduate Employment Earnings		2017	2018	2019	2020
Experiential Learning		2020	2021	2022	2023
Research Revenue from Private Sector		2020	2021	2022	2023
Skills & Competencies			2022	2023	2024

*Potentially affectable by institution once announced by ministry in 2019 as an SMA3 metric. Based on an annual report back in Fall of each SMA3 year.

Legend: Dark grey denotes limited time remaining to potentially affect; Light grey denotes historical result with no time remaining to potentially affect; Blue denotes potentially affectable.

Institutional Weighting Strategy: Stage A

Equal Weights Across Activated Metrics

	Institutional Assigned Weightings				
	2020-21	2021-22	2022-23	2023-24	2024-25
	Max 35% Min 10%	Max 30% Min 5%	Max 25% Min 5%	Max 25% Min 5%	Max 25% Min 5%
Metric					
Graduate Employment Rate in a related field	16.7%	11.0%	10.6%	10.6%	10.6%
Institutional Strength/Focus	16.7%	11.0%	10.6%	10.6%	10.6%
Graduation Rate	16.7%	11.0%	10.6%	10.6%	10.6%
Community/Local Impact	16.7%	11.0%	10.6%	10.6%	10.6%
Institution-Specific (Economic Impact)	16.7%	11.0%	10.6%	10.6%	10.6%
Federal Tri-Agency Funding Secured	16.7%	11.0%	10.6%	10.6%	10.6%
Graduate Employment Earnings		11.0%	10.6%	10.6%	10.6%
Experiential Learning		11.0%	10.6%	10.6%	10.6%
Research Revenue from Private Sector		11.0%	10.6%	10.6%	10.6%
Skills & Competencies*			5.0%	5.0%	5.0%
Total	100%	100%	100%	100%	100%

The ministry will calculate the dollar value for each assigned metric weight provided by the institution.

*The Skills & Competencies metric for all institutions will be weighted at 5% starting in year 2022-23 for participation and posting of results online.

Institutional Weighting Strategy: Stage B

Preliminary Risk-Adjusted Weights

	Institutional Assigned Weightings				
	2020-21	2021-22	2022-23	2023-24	2024-25
	Max 35% Min 10%	Max 30% Min 5%	Max 25% Min 5%	Max 25% Min 5%	Max 25% Min 5%
Metric					
Graduate Employment Rate in a related field	10%	5%	5%	5%	5%
Institutional Strength/Focus	30%	30%	25%	25%	25%
Graduation Rate	10%	5%	5%	5%	5%
Community/Local Impact	20%	20%	20%	20%	20%
Institution-Specific (Economic Impact)	20%	15%	10%	10%	10%
Federal Tri-Agency Funding Secured	10%	5%	5%	5%	5%
Graduate Employment Earnings		5%	5%	5%	5%
Experiential Learning		10%	15%	15%	15%
Research Revenue from Private Sector		5%	5%	5%	5%
Skills & Competencies*			5%	5%	5%
Total	100%	100%	100%	100%	100%

The ministry will calculate the dollar value for each assigned metric weight provided by the institution.

*The Skills & Competencies metric for all institutions will be weighted at 5% starting in year 2022-23 for participation and posting of results online.

Institutional Weighting Strategy: Stage C

1st Draft Internal Priorities/Values Additional Adjustment

Metric	Institutional Assigned Weightings				
	2020-21	2021-22	2022-23	2023-24	2024-25
	Max 35% Min 10%	Max 30% Min 5%	Max 25% Min 5%	Max 25% Min 5%	Max 25% Min 5%
Graduate Employment Rate in a related field	10%	10%	10%	10%	10%
Institutional Strength/Focus	30%	20%	15%	15%	15%
Graduation Rate	10%	10%	10%	10%	10%
Community/Local Impact	20%	15%	15%	15%	15%
Institution-Specific (Economic Impact)	20%	15%	10%	10%	10%
Federal Tri-Agency Funding Secured	10%	10%	10%	10%	10%
Graduate Employment Earnings		5%	10%	10%	10%
Experiential Learning		10%	10%	10%	10%
Research Revenue from Private Sector		5%	5%	5%	5%
Skills & Competencies*			5%	5%	5%
Total	100%	100%	100%	100%	100%

The ministry will calculate the dollar value for each assigned metric weight provided by the institution.

*The Skills & Competencies metric for all institutions will be weighted at 5% starting in year 2022-23 for participation and posting of results online.

Discussion Questions

1. What criteria should be used to arrive at Ryerson's institutional strength/focus for SMA3?
2. Which metric should Ryerson adopt as its institution-specific economic impact measure?
3. When assigning weights to metrics, how should we balance internal priorities/values with the need to protect Ryerson's government grant revenue?

Next Steps

- SMA Town Hall 1 (evening) – October 24th
- SMA Town Hall 2 (daytime) – October 29th
- Institutional site visit by ministry – week of November 11th
- **Institutional submission due to ministry – December 17th**
- Review by ministry – December 18th to February 7th
- **Refined/finalized institutional submission due to ministry – February 18th**
- Ministry signing period – March 16th to 20th
- **Signed institutional submission due to ministry for posting – March 30th**

Community Feedback

We welcome ideas, questions and suggestions for Ryerson's next SMA ...

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